NIEHS seeks to support research to fill gaps in knowledge about the area known as environmental justice or equity through grants to universities and other research institutions.

There are few data available regarding levels of exposure and ranges of exposure to which socioeconomically disadvantaged groups are exposed or on exposures of particularly sensitive subgroups such as children, pregnant women, the elderly, the chronically ill, or the undernourished. The role of occupational exposures needs to be better studied, as well as the role of geographical location. The role of inadequate medical care also needs to be researched; the lack of resources for early identification of the effects of toxic agents may lead to an increased disease burden in people economically least able to cope with it.

NIEHS will address these questions through the Community Outreach and Prevention Education Program (COPE), which focuses on direct interaction with underserved populations, to directly involve these populations in determining their future with respect to environmental public health. The main objective of the COPE Program is to establish a new research paradigm linking members of the community who are affected by environmental conditions with researchers. These preliminary investigations will gather descriptive data so that further research hypotheses can be formed and protocols developed for testing.

Examples of research and related activities that may be appropriate under COPE are collecting and analyzing data by income and race to assess the impact of the environment on human health; developing efficacious methods for risk communication in minority and low-income communities; carrying out community-based training to increase environmental health literacy; and creating partnerships between research institutions, health care providers, and low-income communities.

For further information contact Donald I. McRee, Environmental Health Resources Branch, NIEHS, (919) 541-7508, FAX (919) 541-2843.

Environmental Factors and Breast Cancer

NIEHS and the National Cancer Institute have jointly funded six epidemiologic studies to better understand the causation of breast cancer in high risk areas including Connecticut, Delaware, Maryland, Massachusetts, New Hamshire, New Jersey, Rhode Island, Vermont, and Washington, DC. The studies are designed to take known risk factors into consideration and focus on markers or indicators of envi-

ronmental exposure that may influence geographic differences in rates and changes over time in incidence and mortality. Grants awarded were as follows:

- Tongzhang Zheng, Yale University, "Organochlorine Compounds and Risk of Breast Cancer";
- Mary S. Wolff, Mount Sinai School of Medicine, "Environmental and Genetic Determinants in Breast Cancer":
- David Hunter, Brigham and Womens Hospital, Inc., "Environmental Risk Factors and Breast Cancer in the NHS".
- Jo L. Freudenheim, State University of Buffalo, "Environmental and Genetic Determinants of Breast Cancer";
- Lee S. Caplan, Research Foundation of SUNY, "EMF, OCPS and Breast Cancer on Long Island, New York"; and
- Kathy J. Helzlsouer, Johns Hopkins University, "Environmental Factors and Breast Cancer Risk in Maryland."

NIEHS Needs Assistance in Clearinghouse

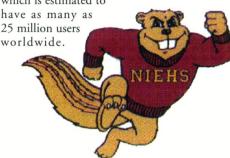
By mid-year 1994, NIEHS is planning to establish and begin operation of an environmental health clearinghouse available via a toll-free telephone line and/or by mail to the general public, patients, physicians, and industrial hygienists. In preparation for this clearinghouse, NIEHS is currently developing a directory of information systems available to the general public, that provide information needed to better understand the contribution of environmental factors to the burden of human disease and disabilities.

All systems or services that provide information to respond to environmental and medical emergencies or that provide general information to understand and evaluate health and environmental risks in the home, ambient, and work environments will be included. If you know of a resource accessible by telephone (e.g., clearinghouse operations, hot-line and health information service desk operations, and on-line systems accessed via modems), contact Barbara Jaffe, Information Ventures, Inc., 10,000 Newhall Road, Potomac, MD 20854; telephone (301) 983-5418, FAX (301) 983-5426.

Coming Soon to a VDT Near You—Gopher

The National Institute of Environmental Health Sciences now has available selected NIEHS and National Toxicology Program information in electronic format worldwide, through access to the Internet and Gopher client software.

The Internet is a large network of networks in which regional nets are all interconnected, communicating at amazing speeds. Many of the world's scientific, academic, and industrial communities now use computers linked through electronic networks to share and move vast amounts of information. Through Gopher, NIEHS will offer information to users of Internet, which is estimated to



Digging up information. The Gopher system logo is derived from the University of Minnesota mascot, the "Golden Gophers."

As a server, NIEHS will accept simple inquiries and respond by sending the user a document.

Through Gopher, NIEHS will offer the following information:

- The NIEHS directory—gives an overview and mission statement of NIEHS, a list of current events, press releases, newsletters, phone/fax directories, organizational structure, and maps and background material on NIEHS campuses and Research Triangle Park.
- The EHP directory—contains an overview of EHP, information for perspective authors, subscription information, and text from selected issues.
- The NTP directory—contains abstracts of the more than 400 NTP reports and related information.
- The Research Grants and Contracts (DERT) directory—contains information of interest to grant applicants and lists grants awarded, by year.
- The Intramural Research (DIR) directory—contains information on DNA sequences and protocols.
- The NIEHS Library directory—contains an overview of the NIEHS library, the library's card catalog, reprint/loan requests, lists of in-circulation newsletters, Current Contents, CD-ROM searching, and links to other research libraries.
- The Administrative Information and Applications (OM) directory—contains information and applications of interest to personnel within NIEHS.
- The NIEHS Network Facilities and Support directory—contains on-line versions of "Connections," the NIEHS newsletter focusing on computer technology at NIEHS.